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An Exelon Company

# **National Symposium on Resilient Critical Infrastructure**

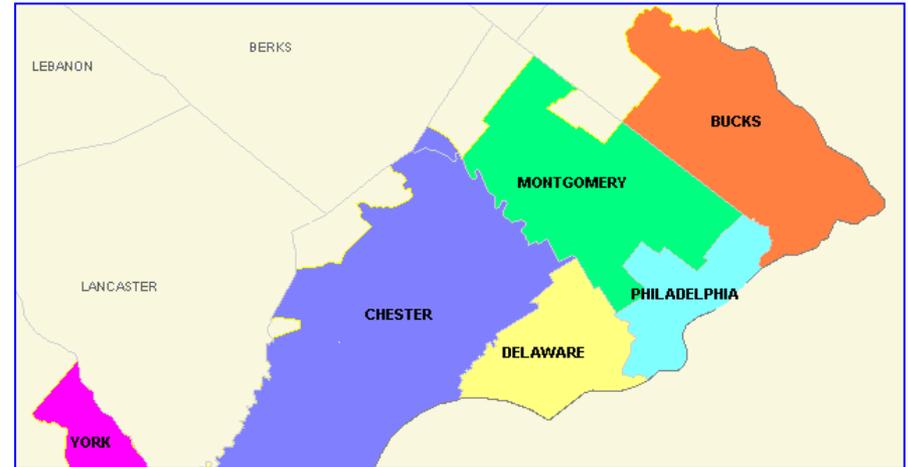
## **State & Local Perspective**

Philadelphia, PA

August 19, 2015

# PECO Background

	<b>BGE</b>	<b>ComEd</b>	<b>PECO</b>	<b>Exelon Utilities</b>
Electric Customers	1.2 million	3.8 million	1.6 million	6.6 million
Peak Load	7,236 MW	23,753 MW	8,983 MW	40,000 MW
Gas Customers	0.7 million	-	0.5 million	1.2 million
Service Territory (sq. miles)	2,500	11,300	2,100	15,900
Total Population Served	2.7 million	8.9 million	3.8 million	15.4 million



# Resiliency Challenges

- Asset Exposure
  - 2000 Sq Mile Service Territory
  - 452 Substations, 15,000 Relays
  - 1000 Miles of Overhead Transmission Lines on 8300 Structures
  
- Physical and Cyber Threats
  - Need to Defend Multiple Assets within a Substation
  - Cyber Threats are both External and Internal
  
- Emerging Operational Technology (OT) Skill Set
  - Intersection of Information Technology (IT) and Field Operations / Engineering
  - New Field with Limited Resources

## Mitigation Strategy - Successes

- Defense in Depth
  - Planning Criteria
  - Mobile Equipment
  - Spare Equipment
  
- Strategic Alliances
  - Other Utilities
  - Regional Spare Sharing / National Spare Sharing Programs
  - Vendor Alliances
  
- Business Continuity Strategy
  - Employee Training: Physical and Cyber Threats
  - Disaster Recovery Drills
  
- Facility Hardening
  - Physical and Cyber

## Mitigation Strategy - Opportunities

- Long Lead Material Sparing
  - 12 Months Lead Time
  - Unique and Specific Design Requirements
  
- Prudency
  - Investment for a Very Low Probability / High Impact Event
  - Go It Alone or Cost Sharing
  
- Operating Technology (OT): Employee Skill Set
  - New Skill Set – Intersection of IT and Field Engineering
  - Highly Demanded Resources in Short Supply